The list of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A composition comprising:

(a) an RAR antagonist; ~~and~~

(b) a pharmaceutically acceptable carrier~~[[,]]~~; and

(c) a chondrogenic stimulator,

wherein said composition induces chondrogenesis leading to cartilage formation or chondrogenesis ~~and related skeletal development~~ leading to cartilage formation that further mediates formation of new bone tissue in a vertebrate.

2. (Currently Amended) The composition as claimed in claim 1, ~~further comprising~~ wherein said chondrogenic stimulator is a protein selected from the group consisting of a bone morphogenetic protein (BMP), an osteogenic protein[[,]] (OPS), a cytokine**[[,]]** and combinations thereof.

3. (Original) The composition as claimed in claim 2, wherein said BMP is selected from the group consisting of BMP-2, BMP-4 and BMP-5.

4. (Original) The composition as claimed in claim 3, wherein said osteogenic protein is OP-1.

5. (Currently Amended) The composition of claim 1, wherein the RAR antagonist is present in an amount capable of stimulating chondrogenesis ~~or chondrogenesis and associated differentiation of skeletal progenitor cells~~.

6. (Previously Presented) The composition of claim 1, wherein said composition is provided as a solution, suspension, gel, matrix, cream, gel, film, paste, capsule, pill, tablet or encapsulated within liposomes.

7. (Original) The composition of claim 1, wherein said composition is administered via intra-articular injection.

8. (Original) The composition of claim 1, wherein said composition is provided within a biodegradable implantable matrix.

9. (Currently Amended) A method for inducing chondrogenesis leading to cartilage formation or chondrogenesis ~~and associated skeletal development~~ leading to cartilage formation that further mediates formation of new bone tissue in a vertebrate, said method comprising administering a therapeutically effective amount of an RAR antagonist and a pharmaceutically acceptable carrier to said vertebrate.

10. (Previously Presented) The method of claim 9, wherein said administration is local or systemic.

11. (Previously Presented) The method of claim 9, wherein said administration is *in vitro* or *in vivo*.

12. (Original) A morphogenic device for implantation in a vertebrate, the device comprising:

(a) an implantable biocompatible carrier; and

(b) an RAR antagonist dispersed within or on said carrier.

13. (Currently Amended) The device according to claim 12, wherein said carrier comprises demineralized bone, protein-extracted bone, particulate bone, allogenic bone, ~~or~~ xenogenic bone or combinations thereof.

14. (Currently Amended) The device according to claim 12, wherein said ~~device~~ carrier ~~comprises mineral-free, delipidated Type I insoluble~~ is selected from the group consisting of semi-permeable polymer matrices, hydroxyapatite, collagen, tricalcium phosphate and copolymers of glycolid, lactic and butyric acid.

15. (Original) The device according to claim 12, wherein said device comprises a biodegradable sponge.

16. (Withdrawn) A method for producing a chondrocyte from a chondroprogenitor mesenchymal cell comprising contacting said chondroprogenitor mesenchymal cell with an RAR antagonist agent *in vitro*.

17. (Currently Amended) A method for promoting *in vivo* integration of an implantable prosthetic device, into a target tissue of a vertebrate, the method comprising ~~the steps of~~:

(a) providing on a surface of the prosthetic device a composition comprising ~~an~~ RAR antagonist and a pharmaceutically acceptable carrier; and

(b) implanting the device in a vertebrate, at a site where the target tissue and surface of the prosthetic device are maintained at least partially in contact for a time sufficient for said composition to stimulate chondrogenesis to ~~permit enhanced~~ enhance tissue growth between the target tissue and the device.

18. (Currently Amended) The method according to claim 17, wherein said target tissue is selected from the group consisting of cartilage, ~~and~~ bone and combinations thereof.

19. (Currently Amended) A method of treating a cartilage associated degenerative condition in a vertebrate comprising ~~the step of~~ administering a pharmaceutical composition ~~as claimed in claim 1~~ comprising an RAR antagonist.

20. (Currently Amended) A method for promoting chondrogenesis ~~and associated bone tissue formation~~ at a site of skeletal surgery in a vertebrate, the method comprising ~~the steps of~~ delivering an RAR antagonist composition at the site of skeletal surgery wherein such delivery ~~promotes the formation of new bone tissue~~ induces chondrogenesis leading to cartilage formation at said site or chondrogenesis leading to cartilage formation that further mediates formation of new bone tissue at said site.

21. (Currently Amended) A method for repairing large segmental skeletal gaps and non-union fractures arising from trauma or surgery in vertebrates, the method comprising delivering an RAR antagonist composition at the site of the segmental skeletal gap or non-union fracture wherein such delivery promotes chondrogenesis leading to cartilage formation at said site or chondrogenesis leading to cartilage formation that further mediates formation of new bone tissue~~which mediates the formation of new bone tissue~~.

22. (Withdrawn) A method for aiding the attachment of implantable prosthesis at cartilageous sites and for maintaining the long term stability of the prostheses in vertebrates, the method comprising coating selected regions of an implantable prosthesis with a RAR antagonist composition and implanting the coated prosthesis into a cartilageous site wherein such implantation promotes the formation of new cartilage tissue.

23. (Withdrawn) A method of producing cartilage at a cartilage defect *in vivo*, said method comprising:

implanting into the defect a population of chrondrogenic cells which have been cultured in the presence of a RAR antagonist.

24. (Currently Amended) A method for treating degenerative joint disease characterized by cartilage degeneration, said method comprising:

delivering a therapeutically effective amount of ~~an~~ RAR antagonist to the site of disease~~, wherein such delivery stimulates~~ to stimulate chondrogenesis at said site of disease.

25. (Original) The method according to claim 24, wherein said RAR antagonist is delivered by intra-articular injection.

26. (Original) The method according to claim 24, wherein said disease is arthritis.

27-29. (Canceled)

30. (Currently Amended) The ~~composition~~ method of claim ~~[[1]]~~ 9, wherein said RAR antagonist antagonizes one or more of RARα, RARβ or RARγ.

31. (Currently Amended) The ~~composition~~ method of claim ~~[[1]]~~ 9, wherein said ~~composition~~ method comprises ~~is administered for the~~ treatment of arthritis, abnormal cartilage formation~~[[,]]~~ and cartilage defects ~~and/or bone defects~~.

32. (New) The method of claim 30 ~~9~~, wherein said RAR antagonist antagonizes RARα.

33. (New) The method of claim 30 ~~9~~, wherein said RAR antagonist antagonizes RARβ.

34. (New) The method of claim 30 ~~9~~, wherein said RAR antagonist antagonizes RARγ.